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DATA FROM THE COMMERCIAL FISHERY FOR LAKE WHITEFISH, *Coregonus clupeaformis* (Mitchill), ON GREAT SLAVE LAKE, NORTHWEST TERRITORIES, 1993/94 to 1995/96

by

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ABSTRACT

Read, C.J. and W.E.F. Taptuna. 1997. Data from the commercial fishery for lake whitefish, *Coregonus clupeaformis* (Mitchill), on Great Slave Lake, Northwest Territories, 1993/95 to 1995/96. Can. Data Rep. Fish. Aquat. Sci. 1019: v + 32 p.

Data from the fish plant sampling program on Great Slave Lake are presented. Production figures for lake whitefish and other species are shown. A total of 7 345 lake whitefish were sampled for length, weight and age. Ageing structures were collected but no age determination was done.

Key words: commercial fishing; fishery management; monitoring.

RÉSUMÉ

Read, C.J. and W.E.F. Taptuna. 1997. Data from the commercial fishery for lake whitefish, *Coregonus clupeaformis* (Mitchill), on Great Slave Lake, Northwest Territories, 1993/94 to 1995/96. Can. Data Rep. Fish. Aquat. Sci. 1019: v + 32 p.

Le rapport présente des données sur le programme d'échantillonnage à l'usine de transformation du poisson du Grand lac des Esclaves. On y donne les chiffres de production pour le grand corégone et d'autres espèces. Les données sur l'age, la longueur et le poids ont été recueillies à partir d'un échantillon de 7 345 grands corégones. Les données sur le vieillissement ont à recueillies mais on n'a pas déterminé l'age.

Mots-clés: pêche commerciale; gestion des pêches; contrôle.

INTRODUCTION

Commercial fishing first began on Great Slave Lake in 1945. Since then the fishery has been monitored annually for total catch; however, few studies were conducted on the effects of exploitation on the stocks of the commercial species (Rawson 1951, 1953a; Keleher 1972; Kennedy 1956) until the 1970's.

In 1971, the Department of Fisheries began a long term stock assessment and monitoring program designed to collect information considered essential for the sound management of the Great Slave Lake commercial fishery. These programs are consistent with the recommendation of the Great Slave Lake Working Party (1969) outlined in Roberge et al. (1982).

In order to meet these objectives, a three-component field study was implemented including fish plant sampling, fishery observations and experimental gillnetting. Results of this work for the years 1972 to 1984 have been described by Bond (1974a, b, 1975a, b), Bond and Turnbull (1973), Moshenko et al. (1978, 1981), Moshenko and Low (1978a, b, 1979, 1980) Roberge et al. (1982, 1984), Low and Read (1987), Low et al. (1989) and Low and Read (1993) and Read and Taptuna (1995).

Only the fish plant sampling component was carried out for the three years of data presented in this report.

STUDY AREA

Great Slave Lake lies in the southwest corner of the District of Mackenzie, Northwest Territories (Fig. 1). It is the fifth largest lake in North America, having a surface area of 27 195 km^2 and a drainage area of 985 300 km^2. Stretching 440 km from its extreme east end to the outlet of the Mackenzie River, the lake straddles two physiographic regions. The northeast shore of the north arm and the east arm lie within the Precambrian Shield and have irregular, precipitous margins. The western portion of the lake overlies the alluvial plain known as the Mackenzie Lowlands and has few islands and gently sloping shores. The rivers entering the lake from the shield are cold, clear and rapidly flowing while those entering from the south are slow flowing brown water streams laden with silt during spring and early summer. While the western basin has a maximum depth of approximately 165 m and a mean depth of 42 m, a depth of 625 m has been recorded in the east arm (Rawson 1950). Physical and biological characteristics of the lake have been described in detail by Rawson (1950, 1951, 1953a, b).

DESCRIPTION OF THE FISHERY

Great Slave Lake has been fished commercially since 1945. During the 1950's annual production of whitefish and trout averaged 2.9 million kg as the large accumulated stock was exploited. Since the 1950's commercial production of both species has decreased annually and whitefish and trout have reacted differently to exploitation (Keleher 1972). The commercial fishery on the west end of the lake has now stabilized and is being managed primarily for whitefish production with minimal regard to lake trout, the latter being unable to withstand commercial gillnetting. Inconnu are protected by seasonal closures of inshore areas where they tend to congregate.

Gillnets have been the sole means of exploitation by the commercial fishery since its inception. The legal minimum mesh size was 139 mm stretched mesh until regulation changes in 1977 allowed the use of 133 mm mesh as the legal minimum mesh size. There has been no restriction on the number of nets a fisherman may use since 1961. Almost the entire lake has been open to commercial fishing at some point in the history of the fishery, although certain areas have been closed to protect subsistence and sport fisheries (Fig. 1 and Northwest Territories Fishery Regulations 1985). The east arm of Great Slave Lake (Area VI) was completely closed to commercial fishing in 1974 and is being managed exclusively for subsistence and sport fishing (Moshenko and Gillman 1978).

There are at least 25 fish species in the lake (Keleher 1972) of which only five are of commercial importance. The major commercial species in decreasing order of importance are: lake whitefish, *Coregonus clupeaformis* (Mitchill); lake trout, *Salvelinus namaycush* (Walbaum); inconnu, *Stenodus leucichthys nelma* (Pallas); northern pike, *Esox lucius* (Linnaeus); and walleye (pickerel), *Stizostedion vitreum vitreum* (Mitchill). Cisco, *Coregonus* spp., burbot, *Lota lota* (Linnaeus) and longnose sucker, *Catostomus catostomus* (Forster) may constitute up to 40% or more of the total catch; however, most are culled

on the lake due to a soft market demand.

The commercial portion of the lake is divided into six administrative areas for management purposes and a portion of the total annual quota is allotted to each area (Table 1). The annual quota is based on the period commencing 1 November and terminating on the following 31 October and applies to the combined catch for both the winter and summer fisheries. Previous to the 1990/91 season the entire quota was based on whitefish and trout combined. Starting in the 1990/91 season the quota in administrative areas 1 W, 1 E, 2, 3, and 4 was based on whitefish only, while the area 5 quota remained combined for whitefish and trout. Other species such as inconnu are managed on an individual basis by closing waters where they are vulnerable to over exploitation. More detailed histories of the commercial fishery on Great Slave Lake are given by Kennedy (1956), Keleher (1972) and Bond and Turnbull (1973). The description of the winter and summer fisheries is summarized by Moshenko et al. (1978).

MATERIALS AND METHODS

HARVEST RECORDS AND SAMPLING PROCEDURES

Monthly summaries of the landings by species by administrative area were compiled from the Freshwater Fish Marketing Corporation (FFMC) sales slips by Department of Fisheries and Oceans (DFO) staff in Hay River. Harvest tables were taken from the Annual Summary of Fish and Marine Mammals Data for the Northwest Territories.

The following table lists the factors used to convert various species and forms to round weight:

Species	Form	Conversion Factor
Whitefish	dressed	x 1.17
Pickerel	dressed	x 1.22
	headless dressed	x 1.39
Trout	dressed	x 1.21
	headless dressed	x 1.53
Pike	dressed	x 1.22
	headless dressed	x 1.53
Inconnu	dressed	x 1.16
	headless dressed	x 1.35

Production values presented in this report (Tables 2-8) include whitefish culls at the plant but do not include an estimate of deteriorated whitefish discarded on the lake. Fishermen cull these fish as the nets are lifted but no record is made of the numbers or estimated weight. Fish which do not meet the market size and quality requirements are further culled by graders at the fish plant and the weight is recorded on the sales slip.

Commercial landings of whitefish were sampled from each of the six administrative areas fished during the sample periods. Sampling frequency was based on a schedule as follows:

Winter - December 1 to March 30
Summer - June 10 to July 15
Fall - September 1 to October 15

Some deviations from this schedule resulted because of the unavailability of samples within this time frame. The deviations and resulting season designations are as follows:

1994/95	Area II	July 28	summer
1995/96	Area IE	Aug 12	fall
	Area II	Nov 28	winter
	Area III	Aug 12	fall
	Area IV	July 26	summer

Boxes of fish were selected at random from various harvesters' catches as they arrived at the plant. All whitefish in the box, up to a maximum of 70 fish per individual harvester were sampled. Thus, the sample of 200 whitefish should have been taken from at least three different harvesters. An additional 10 fish were sampled to compensate for scale samples which were unsuitable for aging. The fish were measured for fork length (± 1 mm) and dressed weight (± 50 g). Scales were taken from the left side of the fish from the area just above the lateral line and below the dorsal fin. Age determination was not done.

BIOLOGICAL DATA

Data were analyzed using computer facilities (Micro Vax II) based at the Freshwater Institute Science Laboratory, Winnipeg, Manitoba. The Statistical Analysis System (version 6; Third Edition) was used to generate the length and age frequency tables.

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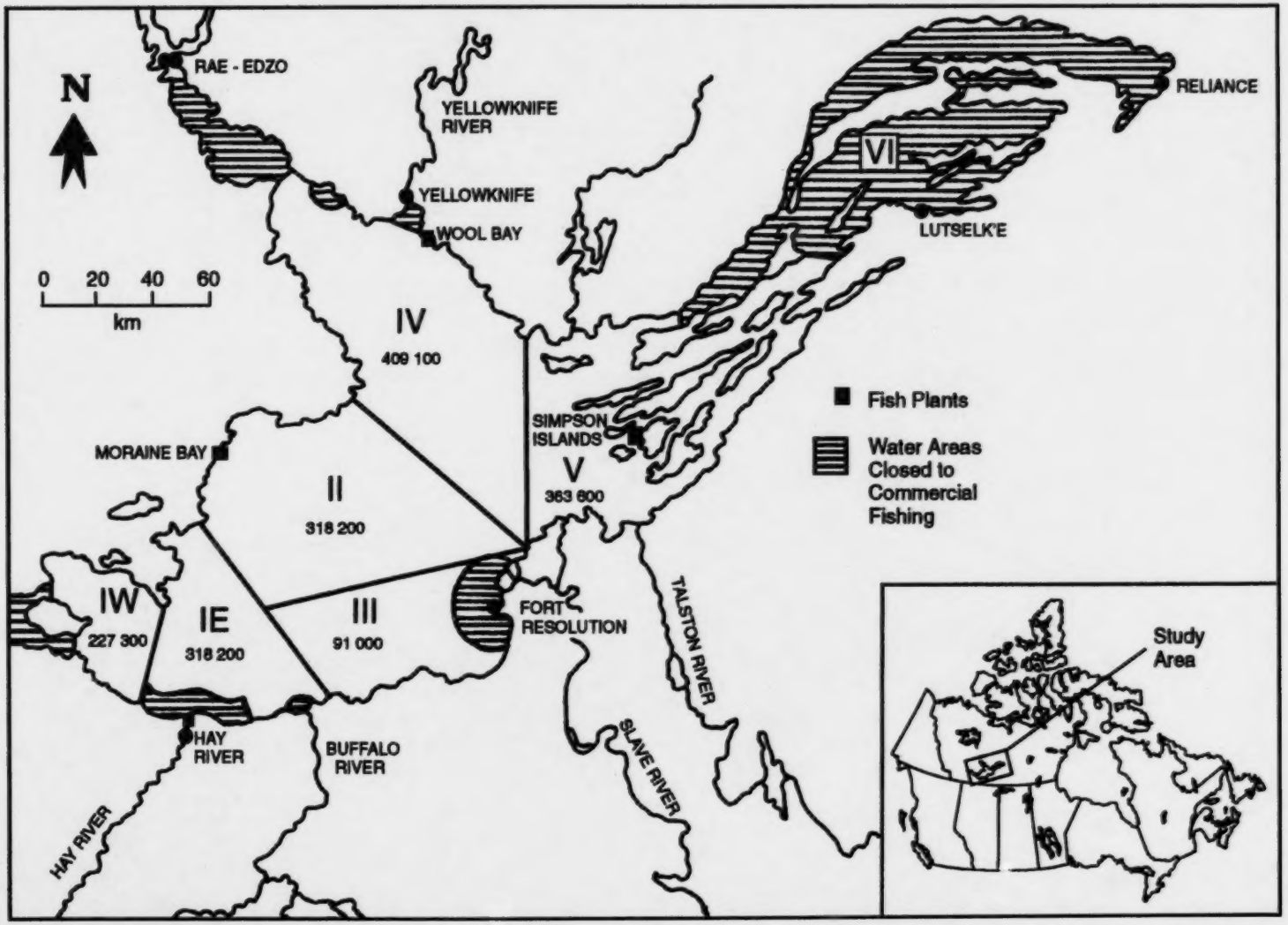

Fig. 1. Map of Great Slave Lake showing the administrative areas and quotas, areas closed to commercial fishing and the location of the fish plants. The Simpson Islands fish plant has not been in operation since 1991.

Table 1. Commercial quotas in effect on Great Slave Lake during the 1975/76 to 1995/96 seasons.

Year[1]	Commercial Quota of Whitefish and Trout[1] (kg round weight)						
	Area IW	Area IE	Area II	Area III	Area IV	Area V	Total
1975-76	227 273	318 181	681 819	Nil	622 727	325 000	2 175 000
1976-77	227 273	318 181	318 181	Nil	409 091	272 729	1 545 455
1977-78	227 273	318 181	318 181	Nil	409 091	272 729	1 545 455
1978-79	227 273	318 181	318 181	45 455	409 091	295 455	1 613 636
1979-80	227 273	318 181	318 181	45 455	409 091	363 637	1 681 818
1980-81	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1981-82	227 300	318 200	318 200	79 500	409 100	363 600	1 715 900
1982-83	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1983-84	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1984-85	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1985-86	227 300	318 200	318 200	70 000	409 100	363 600	1 706 400
1986-87	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1987-88	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1988-89	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1989-90	227 300	318 200	318 200	45 500	409 100	363 600	1 681 900
1990-91[2]	227 300	318 200	318 200	91 000	409 100	363 600	1 727 400
1991-92[2]	227 300	318 200	318 200	91 000	409 100	363 600	1 727 400
1992-93[2]	227 300	318 200	318 200	91 000	409 100	363 600	1 727 400
1993-94	227 300	318 200	318 200	91 000	409 100	363 600	1 727 400
1994-95	227 300	318 200	318 200	91 000	409 100	363 600	1 727 400
1995-96	227 300	318 200	318 200	91 000	409 100	363 600	1 727 400

[1] Season runs from November 1 of one year to October 31 of the next year.
[2] Quota includes whitefish only for all areas except Area V which includes whitefish and lake trout combined.

Table 2. Total production of commercial species (kg round weight) by administrative area, November 1, 1993 to October 31, 1994.

	Production from each Administration Area						
Species 1	Area IW	Area IE	Area II	Area III	Area IV	Area V	Total
Whitefish	243 498	274 792	193 597	44 399	391 499	13 146	1 160 931
Trout	8 053	32 291	16 386	413	16 811	2 271	76 225
Pike	46 061	19 930	12 787	16 152	43 730	393	139 053
Inconnu	1 683	5 686	293	5 259	3 404	3 966	20 291
Walleye	220	472	264	1 764	16 684	288	19 692
Burbot	460	307	0	0	0	0	767
Sucker	0	0	0	0	0	0	0
Total	299 975	333 478	223 327	67 987	472 128	20 064	1 416 959

Note: The Area V quota is for whitefish and trout; other quotas on the lake are for lake whitefish only and other species caught are considered by-catch.

Table 3. Total production of commercial species (kg round weight) by administrative area, November 1, 1994 to October 31, 1995.

	Production from each Administration Area						
Species 1	Area IW	Area IE	Area II	Area III	Area IV	Area V	Total
Whitefish	240 531	129 165	223 632	42 226	350 556	111 327	1 097 437
Trout	6 163	10 842	10 102	226	22 498	45 882	95 713
Pike	72 924	9 561	21 133	7 670	77 364	35 827	224 479
Inconnu	1 043	6 623	385	3 254	4 992	19 463	35 760
Walleye	787	392	393	2 405	6 325	25	10 327
Burbot	549	156	261	0	2 754	2 592	6 312
Sucker	0	0	0	346	0	0	346
Total	321 997	156 739	255 906	56 784	464 489	215 116	1 470 374

Note: The Area V quota is for whitefish and trout; other quotas on the lake are for lake whitefish only and other species caught are considered by-catch.

Table 4. Total production of commercial species (kg round weight) by administrative area, November 1, 1995 to October 31, 1996.

	Production from each Administration Area						
Species 1	Area IW	Area IE	Area II	Area III	Area IV	Area V	Total
Whitefish	234 318	136 944	212 501	59 261	368 192	141 840	1 153 056
Trout	6 254	16 148	9 483	216	30 880	56 563	122 544
Pike	55 966	14 282	7 597	2 928	38 054	12 173	131 000
Walleye	2 080	2 010	172	827	4 838	100	10 027
Inconnu	488	5 035	380	4 945	6 368	36 562	53 778
Burbot	1 381	7 047	19 433	6 101	28 542	5 763	68 267
Sucker	392	1 735	4 706	252	1 261	86	8 432
Total	300 879	183 201	254 272	74 530	478 135	253 087	1 547 104

Note: The Area V quota is for whitefish and trout; other quotas on the lake are for lake whitefish only and other species caught are considered by-catch.

Table 5. Production of whitefish and trout (kg round weight) from each administrative area for winter 1993/94 and summer, 1994.

	Winter		Summer		Total		
Administrative Area	Whitefish	Trout	Whitefish	Trout	Whitefish	Trout	Total
IW	205 574	6 417	37 924	1 636	243 498	8 053	251 551
IE	33 882	922	240 910	31 369	274 792	32 291	307 083
II	35 966	531	157 631	15 855	193 597	16 386	517 066
III	6 107	73	38 292	340	44 399	413	44 812
IV	170 100	1 825	221 399	14 986	391 499	16 811	408 310
V	7 917	201	5 229	2 070	13 146	2 271	15 417
Total	459 546	9 969	701 385	66 256	1 160 931	76 225	1 237 156

Note: The Area V quota is for whitefish and trout; other quotas on the lake are for lake whitefish only and other species caught are considered by-catch.

Table 6. Production of whitefish and trout (kg round weight) from each administrative area for winter 1994/95 and summer, 1995.

Administrative Area	Winter		Summer		Total		
	Whitefish	Trout	Whitefish	Trout	Whitefish	Trout	Total
IW	178 276	3 637	62 255	2 526	240 531	6 163	246 694
IE	18 799	270	110 366	10 572	129 165	10 842	140 007
II	39 575	642	184 057	9 460	223 632	10 102	233 734
III	2 263	36	39 963	190	42 226	226	42 452
IV	110 218	1 887	240 338	20 611	350 556	22 498	373 054
V	69 864	21 170	41 463	24 712	111 327	45 882	157 345
Total	418 995	27 642	678 442	68 071	1 097 437	95 713	1 193 150

Note: The Area V quota is for whitefish and trout; other quotas on the lake are for lake whitefish only and other species caught are considered by-catch.

Table 7. Production of whitefish and trout (kg round weight) from each administrative area for winter 1995/96 and summer, 1996.

Administrative Area	Winter		Summer		Total		
	Whitefish	Trout	Whitefish	Trout	Whitefish	Trout	Total
IW	154 907	2 265	79 411	3 989	234 318	6 254	240 572
IE	28 132	1 098	108 812	15 050	136 944	16 148	153 092
II	45 605	1 304	166 896	8 179	212 501	9 483	221 984
III	0	0	59 261	216	59 261	216	59 477
IV	122 937	1 771	245 255	29 109	368 192	30 880	399 072
V	108 994	14 766	32 846	44 797	141 840	59 563	201 403
Total	460 575	21 204	692 481	101 340	1 154 056	122 544	1 275 600

Note: The Area V quota is for whitefish and trout; other quotas on the lake are for lake whitefish only and other species caught are considered by-catch.

Table 8. Annual production (x1000 kg, round weight) of commercial species, Great Slave Lake, 1972/73 to 1995/96.

Year[1]	Whitefish	Trout	Pike	Walleye	Inconnu	Total	
						Whitefish & Trout	All species
1972-73	1 004	92	155	17	103	1 096	1 371
1973-74	973	111	-	-	-	1 084	1 084
1974-75	921	99	96	10	95	1 020	1 221
1975-76	975	83	103	9	77	1 058	1 247
1976-77	1 172	108	118	11	86	1 280	1 495
1977-78	1 107	105	157	13	153	1 212	1 535
1978-79	1 065	121	129	6	153	1 186	1 474
1979-80	1 178	122	199	19	65	1 300	1 583
1980-81	1 097	85	151	4	43	1 182	1 380
1981-82	1 139	75	166	8	23	1 214	1 411
1982-83	899	61	115	5	16	960	1 096
1983-84	863	50	108	15	47	913	1 083
1984-85	876	110	155	13	72	986	1 226
1985-86	1 219	107	130	12	62	1 326	1 530
1986-87	1 310	127	140	14	74	1 437	1 665
1987-88	1 438	65	113	20	74	1 503	1 710
1988-89	1 451	137	170	20	84	1 588	1 863
1989-90	1 317	87	204	34	69	1 404	1 711
1990-91	1 452	87	187	12	54	1 539	1 792
1991-92	1 215	48	162	4	27	1 263	1 456
1992-93	1 202	62	143	5	43	1 264	1 455
1993-94	1 161	76	139	20	20	1 237	1416
1994-95	1 097	95	224	10	36	1 193	1 462
1995-96	1 153	123	131	54	54	1 276	1 471

[1] Season runs from November 1 of one year to October 31 of the next year.

Table 9. Weight composition by market weight intervals for

MARKET WEIGHT INTERVAL (DRESSED)	AREA IE		AREA IW	
	NO.	%	NO.	%
NO MARKET (< 0.45 kg)	-	-	-	-
SMALL (0.45-0.69 kg)	21	4	15	3
MEDIUM (0.70-1.39 kg)	415	88	361	76
LARGE (1.40-1.80 kg)	29	6	83	17
JUMBO (> 1.80 kg)	5	1	17	4
TOTAL	470		476	

lake whitefish from Great Slave Lake commercial fishery, 1993\94.

AREA II		AREA III		AREA IV		AREA V		TOTAL	
NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
-	-	1	-	-	-	-	-	1	-
-	-	7	3	46	6	-	-	89	4
-	-	182	87	728	88	-	-	1686	85
-	-	18	9	38	5	-	-	168	8
-	-	2	-	14	2	-	-	38	2
-		210		826		-		1982	

Table 10. Length composition of whitefish for all areas combined from Great Slave Lake commercial fishery, 1993/94.

LENGTH INTERVAL (mm)	NO.	%	FORK LENGTH(mm) MEAN	FORK LENGTH(mm) SD.	DRESSED WEIGHT (g) MEAN	DRESSED WEIGHT (g) SD.
320-329	1	-	328	-	815	-
330-339	2	0.1	337	1.4	453	60.1
340-349	4	0.2	345	3.0	509	35.0
350-359	9	0.5	354	2.6	593	89.2
360-369	18	0.9	364	2.8	613	50.2
370-379	44	2.2	374	3.1	669	51.4
380-389	75	3.8	385	2.7	735	60.8
390-399	179	9.0	394	2.8	786	62.0
400-409	235	11.9	404	2.9	850	74.3
410-419	271	13.7	414	2.8	896	72.0
420-429	268	13.5	424	2.7	973	81.9
430-439	232	11.7	434	2.7	1047	95.8
440-449	188	9.5	443	2.7	1110	120.4
450-459	118	6.0	453	3.0	1204	131.1
460-469	106	5.3	464	2.7	1272	129.3
470-479	67	3.4	473	2.8	1378	154.6
480-489	52	2.6	484	2.9	1404	158.3
490-499	36	1.8	494	2.9	1530	164.7
500-509	30	1.5	502	2.4	1659	197.8
510-519	23	1.2	513	3.3	1727	237.2
520-529	7	0.4	525	2.4	1971	196.0
530-539	7	0.4	532	1.8	2151	318.1
540-549	4	0.2	544	1.7	2251	240.4
550-559	4	0.2	552	2.2	2263	265.8
560-569	1	-	562	-	2380	-
570-579	1	-	573	-	2165	-
TOTAL	1982					
MEAN			429	33.4	1028	278.1

Table 11. Length composition of commercial whitefish for each seasonal period from area IW, 1993/94.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
350-359	2	356	618	-	-	-	-	-	-	2	356	2.1	618	74.2
360-369	3	360	537	1	367	675	-	-	-	4	362	3.5	571	75.8
370-379	4	373	613	-	-	-	-	-	-	4	373	3.0	613	41.3
380-389	9	384	703	1	388	670	-	-	-	10	384	3.4	700	53.6
390-399	20	395	760	4	398	838	-	-	-	24	395	2.8	773	57.4
400-409	30	404	805	13	405	955	-	-	-	43	405	2.7	850	105.2
410-419	35	413	880	12	415	961	-	-	-	47	414	2.9	901	70.9
420-429	25	425	965	23	425	1053	-	-	-	48	425	2.6	1007	82.4
430-439	21	434	1013	31	434	1081	-	-	-	52	434	3.1	1054	90.7
440-449	25	443	1081	25	446	1198	-	-	-	50	444	2.9	1139	104.2
450-459	6	455	1194	25	454	1208	-	-	-	31	454	3.4	1205	106.4
460-469	14	464	1218	28	464	1292	-	-	-	42	464	2.9	1268	114.3
470-479	4	472	1244	19	473	1343	-	-	-	23	473	3.0	1326	135.7
480-489	5	483	1387	23	484	1447	-	-	-	28	484	3.3	1436	105.2
490-499	3	495	1470	21	494	1497	-	-	-	24	494	2.9	1494	152.4
500-509	1	501	1395	15	502	1642	-	-	-	16	502	2.4	1627	179.6
510-519	2	514	1598	16	513	1686	-	-	-	18	513	3.4	1676	198.4
520-529	-	-	-	2	527	1883	-	-	-	2	527	2.1	1883	38.9
530-539	-	-	-	4	533	1960	-	-	-	4	533	2.2	1960	167.5
540-549	1	542	2035	1	544	2175	-	-	-	2	543	1.4	2105	99.0
550-559	-	-	-	2	553	2080	-	-	-	2	553	3.5	2080	212.1
TOTAL	210			266			-			476				
MEAN		424	959		460	1288		-	-		444	37.4	1143	306.5

Table 12. Length composition of commercial whitefish for each seasonal period from area 1E, 1993/94.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
330-339	-	-	-	1	338	495	-	-	-	1	338	-	495	-
340-349	2	345	488	1	349	505	-	-	-	3	346	2.5	493	20.2
350-359	2	356	605	-	-	-	-	-	-	2	356	2.8	605	28.3
360-369	2	362	633	5	366	611	-	-	-	7	365	2.0	617	42.2
370-379	2	378	655	7	374	726	-	-	-	9	375	3.0	710	66.3
380-389	8	384	773	14	386	730	-	-	-	22	385	2.7	745	71.3
390-399	21	394	803	25	394	791	-	-	-	46	394	3.1	796	53.1
400-409	18	403	861	43	405	854	-	-	-	61	404	3.1	856	49.7
410-419	25	413	903	54	414	900	-	-	-	79	414	2.8	901	78.0
420-429	33	424	1000	40	424	952	-	-	-	73	424	2.5	974	72.2
430-439	33	434	1100	34	434	1012	-	-	-	67	434	2.8	1056	107.4
440-449	24	443	1187	13	443	1060	-	-	-	37	443	2.4	1142	143.7
450-459	14	453	1289	6	454	1238	-	-	-	20	453	2.6	1274	113.0
460-469	9	463	1329	11	464	1311	-	-	-	20	463	2.5	1319	161.6
470-479	6	473	1431	5	476	1355	-	-	-	11	475	3.1	1396	131.7
480-489	3	485	1662	1	483	860	-	-	-	4	484	1.9	1461	408.9
490-499	3	492	1698	-	-	-	-	-	-	3	492	3.5	1698	145.7
510-519	3	513	1980	-	-	-	-	-	-	3	513	3.5	1980	231.8
530-539	1	533	2280	-	-	-	-	-	-	1	533	-	2280	-
540-549	1	546	2595	-	-	-	-	-	-	1	546	-	2595	-
TOTAL	210			260			-			470				
MEAN		427	1063		417	924		-	-		421	27.8	986	246.0

Table 13. Length composition of commercial whitefish for each seasonal period from area III, 1993/94.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
330-339	-	-	-	1	336	410	-	-	-	1	336	-	410	-
350-359	-	-	-	3	353	633	-	-	-	3	353	2.5	633	125.0
360-369	-	-	-	1	361	640	-	-	-	1	361	-	640	-
370-379	-	-	-	3	377	693	-	-	-	3	377	2.3	693	75.1
380-389	-	-	-	8	386	769	-	-	-	8	386	2.8	769	60.6
390-399	-	-	-	27	395	814	-	-	-	27	395	2.6	814	71.4
400-409	-	-	-	34	404	874	-	-	-	34	404	3.1	874	75.6
410-419	-	-	-	29	414	922	-	-	-	29	414	2.7	922	51.0
420-429	-	-	-	37	424	1003	-	-	-	37	424	3.1	1003	79.3
430-439	-	-	-	21	434	1091	-	-	-	21	434	2.6	1091	98.5
440-449	-	-	-	16	444	1139	-	-	-	16	444	2.6	1139	133.9
450-459	-	-	-	9	452	1266	-	-	-	9	452	1.7	1266	74.7
460-469	-	-	-	2	466	1335	-	-	-	2	466	4.2	1335	176.8
470-479	-	-	-	10	473	1516	-	-	-	10	473	2.1	1516	80.9
480-489	-	-	-	3	485	1240	-	-	-	3	485	1.5	1240	131.1
490-499	-	-	-	3	493	1603	-	-	-	3	493	2.9	1603	145.0
500-509	-	-	-	2	503	1820	-	-	-	2	503	2.8	1820	226.3
530-539	-	-	-	1	531	2750	-	-	-	1	531	-	2750	-
TOTAL	-			210			-			210				
MEAN		-	-		421	1010		-	-		421	29.2	1010	261.7

Table 14. Length composition of commercial whitefish for each seasonal period from area IV, 1993/94.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
320-329	1	328	815	-	-	-	-	-	-	1	328	-	815	-
340-349	1	342	555	-	-	-	-	-	-	1	342	-	555	-
350-359	1	351	510	-	-	-	1	356	480	2	354	3.5	495	21.2
360-369	5	365	628	-	-	-	1	366	645	6	365	2.5	631	32.5
370-379	21	375	663	2	372	638	5	374	668	28	374	3.3	662	33.8
380-389	23	384	719	4	385	786	8	384	741	35	384	2.5	732	51.9
390-399	52	394	773	12	393	809	18	394	756	82	394	2.7	775	61.7
400-409	54	404	813	17	404	874	26	404	862	97	404	2.7	837	68.5
410-419	52	414	866	26	414	928	38	413	881	116	414	2.8	885	71.2
420-429	54	424	926	34	423	976	22	424	952	110	424	2.9	946	80.3
430-439	38	433	1020	35	433	1030	19	434	1034	92	433	2.4	1027	85.0
440-449	41	443	1053	22	443	1081	22	443	1106	85	443	2.7	1074	106.9
450-459	20	453	1186	21	453	1155	17	453	1169	58	453	2.9	1170	144.2
460-469	12	463	1234	19	464	1254	11	464	1263	42	464	2.5	1251	123.0
470-479	11	473	1390	9	473	1322	3	471	1368	23	473	2.4	1360	175.5
480-489	9	485	1351	2	484	1288	6	484	1413	17	484	2.4	1366	135.9
490-499	2	498	1675	1	494	1355	3	492	1542	6	494	2.9	1555	197.2
500-509	5	503	1688	5	502	1628	2	502	1755	12	502	2.5	1674	219.1
510-519	2	516	1805	-	-	-	-	-	-	2	516	2.1	1805	459.6
520-529	2	523	2233	1	528	1860	2	526	1853	5	525	2.5	2006	227.6
530-539	1	531	2190	-	-	-	-	-	-	1	531	-	2190	-
540-549	-	-	-	-	-	-	1	545	2200	1	545	-	2200	-
550-559	2	552	2445	-	-	-	-	-	-	2	552	1.4	2445	183.8
560-569	1	562	2380	-	-	-	-	-	-	1	562	-	2380	-
570-579	1	573	2165	-	-	-	-	-	-	1	573	-	2165	-
TOTAL	411			210			205			826				
MEAN		422	959		433	1048		427	1001		426	31.9	992	264.3

Table 15. Weight composition by market weight intervals fo

MARKET WEIGHT INTERVAL (DRESSED)	AREA IE		AREA IW	
	NO.	%	NO.	%
NO MARKET (< 0.45 kg)	-	-	-	-
SMALL (0.45-0.69 kg)	26	5	10	2
MEDIUM (0.70-1.39 kg)	438	81	323	75
LARGE (1.40-1.80 kg)	70	13	80	19
JUMBO (> 1.80 kg)	5	-	17	4
TOTAL	539		430	

or lake whitefish from Great Slave Lake commercial fishery, 1994/95.

AREA II		AREA III		AREA IV		AREA V		TOTAL	
NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
1	-	1	-	-	-	1	-	3	-
65	10	13	2	43	7	8	4	165	5
545	87	511	81	540	86	196	93	2553	83
14	2	82	13	42	7	4	2	292	10
5	-	22	3	5	-	1	-	55	2
630		629		630		210		3068	

Table 16. Length composition of whitefish for all areas combined from Great Slave Lake commercial fishery, 1994/95.

LENGTH INTERVAL (mm)	NO.	%	FORK LENGTH(mm) MEAN	SD.	DRESSED WEIGHT (g) MEAN	SD.
300-309	1	-	301	-	380	-
320-329	2	-	324	2.1	433	53.0
330-339	1	-	333	-	475	-
340-349	11	0.4	345	3.1	526	66.9
350-359	21	0.7	354	3.3	571	44.2
360-369	48	1.6	365	2.9	627	49.3
370-379	105	3.4	374	2.9	684	47.8
380-389	181	5.9	384	2.7	736	56.7
390-399	358	11.7	394	2.9	794	57.7
400-409	421	13.7	404	2.9	851	67.1
410-419	400	13.0	414	2.7	898	73.3
420-429	387	12.6	424	2.9	976	80.0
430-439	271	8.8	433	2.8	1029	87.4
440-449	206	6.7	443	2.7	1097	105.7
450-459	149	4.9	453	2.7	1198	121.4
460-469	120	3.9	464	2.9	1275	126.1
470-479	121	3.9	474	2.7	1381	141.9
480-489	87	2.8	483	2.6	1440	134.9
490-499	57	1.9	494	2.5	1569	162.5
500-509	46	1.5	504	3.0	1655	177.9
510-519	38	1.2	514	3.3	1773	209.5
520-529	13	0.4	524	3.2	1872	206.9
530-539	12	0.4	532	2.1	1928	157.7
540-549	7	0.2	544	2.0	2034	219.8
550-559	3	-	550	0.0	1875	272.2
560-569	1	-	563	-	2560	-
580-589	1	-	581	-	2655	-
TOTAL	3068					
MEAN			424	35.5	1000	280.1

Table 17. Length composition of commercial whitefish for each seasonal period from area IW, 1994/95.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
340-349	-	-	-	1	348	560	-	-	-	1	348	-	560	-
360-369	3	362	612	-	-	-	-	-	-	3	362	2.5	612	43.7
370-379	5	373	670	-	-	-	-	-	-	5	373	2.2	670	45.8
380-389	17	383	746	1	383	745	-	-	-	18	383	1.7	746	62.9
390-399	37	394	805	6	395	804	-	-	-	43	394	3.0	805	59.2
400-409	42	404	854	6	406	921	-	-	-	48	404	2.7	863	74.8
410-419	30	414	924	9	412	893	-	-	-	39	414	2.5	916	68.4
420-429	29	423	971	19	424	1008	-	-	-	48	423	3.0	986	79.9
430-439	13	433	1041	20	434	1058	-	-	-	33	434	2.7	1051	87.6
440-449	10	444	1158	17	445	1143	-	-	-	27	445	2.0	1148	124.0
450-459	5	454	1156	19	454	1188	-	-	-	24	454	3.0	1181	96.9
460-469	4	463	1294	19	465	1252	-	-	-	23	464	3.2	1259	115.7
470-479	8	472	1322	27	475	1391	-	-	-	35	474	2.8	1375	131.7
480-489	4	482	1313	19	483	1432	-	-	-	23	483	2.4	1411	126.6
490-499	1	495	1600	18	494	1509	-	-	-	19	494	2.5	1514	136.3
500-509	2	507	1728	10	503	1517	-	-	-	12	504	3.3	1552	134.2
510-519	-	-	-	17	515	1731	-	-	-	17	515	3.0	1731	141.4
520-529	-	-	-	3	526	1793	-	-	-	3	526	3.0	1793	156.7
530-539	-	-	-	4	533	1861	-	-	-	4	533	1.3	1861	62.2
540-549	-	-	-	2	545	2088	-	-	-	2	545	0.0	2088	342.9
550-559	-	-	-	2	550	2020	-	-	-	2	550	0.0	2020	148.5
580-589	-	-	-	1	581	2655	-	-	-	1	581	-	2655	-
TOTAL	210			220			-			430				
MEAN		415	935		464	1300		-	-		440	41.3	1122	322.2

Table 18. Length composition of commercial whitefish for each seasonal period from area IE, 1994/95.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
340-349	2	346	610	-	-	-	-	-	-	2	346	3.5	610	127.3
350-359	2	352	565	-	-	-	-	-	-	2	352	0.0	565	42.4
360-369	6	365	646	4	367	611	-	-	-	10	366	2.9	632	60.4
370-379	16	373	705	2	373	663	6	372	693	24	373	2.5	699	39.6
380-389	30	384	747	4	386	781	11	382	733	45	384	2.9	746	54.1
390-399	48	393	793	15	395	795	15	394	798	78	394	2.9	794	58.1
400-409	47	404	856	12	405	883	20	404	874	79	404	2.7	865	59.6
410-419	27	413	909	15	415	930	19	414	892	61	414	2.6	909	66.2
420-429	18	424	975	23	425	999	16	424	988	57	424	2.8	989	77.8
430-439	5	434	1050	9	434	1082	8	432	1036	22	434	2.6	1058	74.7
440-449	4	445	1069	14	445	1120	9	442	1081	27	444	2.9	1099	96.1
450-459	3	456	1132	14	454	1201	4	453	1114	21	454	2.5	1175	102.8
460-469	1	463	1295	12	465	1290	1	465	1320	14	465	2.9	1292	117.9
470-479	1	474	1355	26	475	1354	6	473	1410	33	474	2.5	1364	125.0
480-489	-	-	-	17	484	1390	3	484	1382	20	484	2.8	1389	120.6
490-499	-	-	-	11	495	1528	2	494	1545	13	494	2.4	1531	112.1
500-509	-	-	-	9	504	1591	-	-	-	9	504	2.8	1591	103.0
510-519	-	-	-	11	516	1647	-	-	-	11	516	3.4	1647	130.0
520-529	-	-	-	6	524	1778	-	-	-	6	524	3.5	1778	84.2
530-539	-	-	-	2	533	1695	-	-	-	2	533	4.2	1695	14.1
540-549	-	-	-	2	544	1875	-	-	-	2	544	2.1	1875	7.1
550-559	-	-	-	1	550	1585	-	-	-	1	550	-	1585	-
TOTAL	210			209			120			539				
MEAN		400	837		453	1204		417	949		424	39.9	1004	283.2

Table 19. Length composition of commercial whitefish for each seasonal period from area II, 1994/95.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
320-329	-	-	-	1	325	395	-	-	-	1	325	-	395	-
330-339	-	-	-	-	-	-	1	333	475	1	333	-	475	-
340-349	2	347	520	1	348	505	2	342	528	5	345	3.3	520	14.6
350-359	6	357	578	3	354	543	1	354	585	10	356	2.7	569	38.4
360-369	2	366	668	9	365	623	4	363	614	15	365	2.7	626	45.5
370-379	14	375	659	10	373	684	11	375	668	35	375	3.0	669	51.9
380-389	16	384	727	17	385	703	15	384	735	48	384	2.8	721	50.2
390-399	37	394	779	31	395	772	22	394	785	90	395	2.9	778	50.8
400-409	46	404	823	30	405	830	37	404	821	113	404	2.9	824	58.4
410-419	41	413	879	32	413	873	26	414	872	99	413	2.8	875	63.3
420-429	24	423	946	21	424	944	26	424	965	71	424	3.0	952	77.1
430-439	11	433	1028	17	434	981	24	433	1014	52	433	3.0	1006	77.3
440-449	4	442	1046	17	444	1088	17	443	1095	38	443	2.6	1087	74.6
450-459	3	455	1125	4	452	1149	10	452	1154	17	452	2.1	1148	85.7
460-469	-	-	-	6	466	1341	7	463	1196	13	464	3.0	1263	121.1
470-479	-	-	-	3	475	1307	3	474	1392	6	475	2.9	1349	185.6
480-489	3	483	1423	2	484	1365	1	483	1425	6	483	2.9	1404	71.4
490-499	-	-	-	-	-	-	2	493	1473	2	493	3.5	1473	24.7
500-509	-	-	-	3	507	1768	-	-	-	3	507	1.7	1768	80.8
520-529	-	-	-	1	520	1790	-	-	-	1	520	-	1790	-
530-539	1	533	1960	-	-	-	1	531	1917	2	532	1.4	1939	30.4
540-549	-	-	-	2	545	2008	-	-	-	2	545	0.0	2008	215.7
TOTAL	210			210			210			630				
MEAN		405	844		414	900		415	913		411	29.0	886	208.6

Table 20. Length composition of commercial whitefish for each seasonal period from area III, 1994/95.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
300-309	1	301	380	-	-	-	-	-	-	1	301	-	380	-
350-359	1	359	610	1	350	625	1	358	590	3	356	4.9	608	17.6
360-369	2	366	660	3	365	685	3	364	637	8	365	3.5	661	44.1
370-379	5	374	731	-	-	-	5	375	711	10	375	3.3	721	57.2
380-389	9	386	747	5	384	822	10	383	754	24	384	2.7	765	43.1
390-399	15	394	80[illegible]	26	394	828	15	394	838	56	394	2.7	823	62.5
400-409	22	405	875	20	405	922	21	404	885	63	405	3.0	893	70.5
410-419	24	413	915	40	414	945	19	413	923	83	413	2.7	931	78.6
420-429	31	424	1011	35	425	1024	24	422	1020	90	424	2.8	1018	78.0
430-439	18	434	1044	25	433	1058	20	433	1095	63	433	2.7	1066	84.0
440-449	16	442	1083	13	444	1187	18	443	1134	47	443	2.6	1131	101.9
450-459	18	453	1289	14	454	1290	19	452	1231	51	453	2.4	1268	127.8
460-469	20	463	1325	8	463	1242	11	463	1274	39	463	2.8	1293	135.1
470-479	7	473	1425	7	472	1519	14	473	1385	28	473	2.5	1429	153.3
480-489	7	482	[illegible]14	2	484	1573	11	482	1500	20	483	2.8	1477	102.5
490-499	5	493	1756	4	491	1654	7	493	1586	16	493	2.5	1656	160.3
500-509	3	504	1923	4	503	1786	7	503	1679	14	504	2.9	1762	211.6
510-519	3	514	1823	3	510	2128	2	511	2168	8	512	2.7	2024	242.5
520-529	2	525	2038	-	-	-	-	-	-	2	525	3.5	2038	38.9
530-539	-	-	-	-	-	-	3	532	2078	3	532	2.9	2078	12.6
TOTAL	209			210			210			629				
MEAN		431	1086		426	1068		435	1123		431	33.8	1092	294.7

Table 21. Length composition of commercial whitefish for each seasonal period from area IV, 1994/95.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
320-329	1	322	470	-	-	-	-	-	-	1	322	-	470	-
340-349	2	342	483	-	-	-	-	-	-	2	342	2.1	483	31.8
350-359	3	353	578	-	-	-	1	352	620	4	353	2.5	589	35.4
360-369	4	365	616	3	362	572	4	365	616	11	364	2.7	604	43.6
370-379	11	375	701	4	377	640	12	374	673	27	375	2.8	679	38.2
380-389	14	383	723	10	386	724	10	383	727	34	384	3.0	724	63.8
390-399	31	394	791	20	395	803	26	393	782	77	394	2.9	791	50.6
400-409	39	403	847	25	403	852	28	405	832	92	404	2.8	844	59.2
410-419	30	413	867	27	414	889	34	415	903	91	414	2.8	887	72.6
420-429	25	423	935	37	423	974	22	423	944	84	423	2.7	954	70.1
430-439	19	433	994	32	433	1011	18	436	1048	69	434	3.0	1016	82.6
440-449	8	444	1051	23	443	1050	11	444	1138	42	444	2.5	1073	117.7
450-459	4	454	1140	10	455	1168	7	455	1232	21	454	2.9	1184	109.0
460-469	7	462	1246	10	465	1220	10	463	1342	27	463	2.9	1272	134.0
470-479	1	470	1260	5	474	1428	7	472	1431	13	472	2.8	1417	124.6
480-489	3	483	1447	1	483	1505	11	483	1507	15	483	2.2	1495	173.6
490-499	4	494	1538	2	495	1700	1	495	1790	7	494	2.2	1620	249.2
500-509	2	507	1675	1	501	1395	5	501	1694	8	502	3.2	1652	161.8
510-519	2	517	1820	-	-	-	-	-	-	2	517	3.5	1820	113.1
530-539	-	-	-	-	-	-	1	530	2185	1	530	-	2185	-
540-549	-	-	-	-	-	-	1	540	2295	1	540	-	2295	-
560-569	-	-	-	-	-	-	1	563	2560	1	563	-	2560	-
TOTAL	210			210			210			630				
MEAN		413	903		423	965		423	1004		420	31.5	958	254.4

Table 22. Length composition of commercial whitefish for each seasonal period from area V, 1994/95.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
340-349	1	345	440	-	-	-	-	-	-	1	345	-	440	-
350-359	2	350	495	-	-	-	-	-	-	2	350	0.0	495	49.5
360-369	1	368	620	-	-	-	-	-	-	1	368	-	620	-
370-379	4	374	683	-	-	-	-	-	-	4	374	1.4	683	44.8
380-389	12	383	716	-	-	-	-	-	-	12	383	2.3	716	60.1
390-399	14	394	768	-	-	-	-	-	-	14	394	2.5	768	66.6
400-409	26	404	825	-	-	-	-	-	-	26	404	3.4	825	64.7
410-419	27	414	870	-	-	-	-	-	-	27	414	3.0	870	70.5
420-429	37	423	931	-	-	-	-	-	-	37	423	2.7	931	62.0
430-439	32	433	976	-	-	-	-	-	-	32	433	2.6	976	89.2
440-449	25	443	1032	-	-	-	-	-	-	25	443	3.1	1032	75.7
450-459	15	452	1094	-	-	-	-	-	-	15	452	2.7	1094	86.2
460-469	4	463	1175	-	-	-	-	-	-	4	463	2.8	1175	71.5
470-479	6	474	1239	-	-	-	-	-	-	6	474	2.9	1239	152.1
480-489	3	482	1547	-	-	-	-	-	-	3	482	2.1	1547	225.9
520-529	1	524	2415	-	-	-	-	-	-	1	524	-	2415	-
TOTAL	210			-			-			210				
MEAN		423	934		-	-		-	-		423	26.0	934	199.8

Table 23. Weight composition by market weight intervals for lake whitefish from Great Slave Lake commercial fishery, 1995/96.

MARKET WEIGHT INTERVAL (DRESSED)	AREA IE		AREA IW		AREA II		AREA III		AREA IV		AREA V		TOTAL	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
NO MARKET (< 0.45 kg)	1	-	-	-	-	-	-	-	-	-	-	-	1	-
SMALL (0.45-0.69 kg)	24	6	8	2	56	14	21	5	34	8	10	5	153	7
MEDIUM (0.70-1.39 kg)	378	90	339	81	320	78	329	79	370	88	179	85	1915	83
LARGE (1.40-1.80 kg)	15	4	57	14	15	4	48	11	13	3	21	10	169	7
JUMBO (> 1.80 kg)	1	-	13	3	20	5	21	5	2	-	-	-	57	2
TOTAL	419		417		411		419		419		210		2295	

Table 24. Length composition of whitefish for all areas combined from Great Slave Lake commercial fishery, 1995/96.

LENGTH INTERVAL (mm)	NO.	%	FORK LENGTH(mm) MEAN	FORK LENGTH(mm) SD.	DRESSED WEIGHT (g) MEAN	DRESSED WEIGHT (g) SD.
330-339	4	0.2	334	4.1	481	25.6
340-349	9	0.4	344	3.0	514	33.2
350-359	13	0.6	354	2.6	560	43.1
360-369	37	1.6	364	2.7	626	53.6
370-379	82	3.6	374	3.0	670	49.6
380-389	172	7.5	384	2.5	743	57.5
390-399	225	9.8	394	2.9	791	65.1
400-409	332	14.5	403	2.7	840	68.3
410-419	309	13.5	413	2.7	904	74.5
420-429	284	12.4	424	2.8	964	83.3
430-439	213	9.3	433	2.5	1019	93.3
440-449	166	7.2	443	2.6	1102	93.0
450-459	117	5.1	453	2.8	1203	121.9
460-469	81	3.5	463	2.6	1284	130.5
470-479	64	2.8	473	2.8	1336	142.0
480-489	50	2.2	483	2.4	1514	194.3
490-499	42	1.8	493	2.4	1565	206.5
500-509	30	1.3	503	2.8	1719	225.2
510-519	22	1.0	513	2.2	1725	182.8
520-529	8	0.3	524	3.7	1849	149.7
530-539	7	0.3	532	3.1	2106	211.8
540-549	10	0.4	542	2.6	2138	225.3
550-559	8	0.3	553	3.0	2322	178.5
560-569	3	0.1	561	1.7	2520	375.9
570-579	2	-	575	3.5	2425	233.3
580-589	4	0.2	582	2.1	2585	422.7
770-779	1	-	778	-	370	-
TOTAL	2295					
MEAN			423	36.9	995	303.9

Table 25. Length composition of commercial whitefish for each seasonal period from area IW, 1995/96.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
360-369	-	-	-	2	363	590	-	-	-	2	363	0.7	590	28.3
370-379	4	375	676	5	375	699	-	-	-	9	375	3.4	689	39.0
380-389	7	385	745	7	384	769	-	-	-	14	385	2.6	757	36.9
390-399	11	393	770	12	394	793	-	-	-	23	393	2.7	782	54.8
400-409	17	404	863	15	403	894	-	-	-	32	404	2.4	878	65.3
410-419	27	413	923	20	414	927	-	-	-	47	414	2.5	924	87.9
420-429	25	424	932	21	424	954	-	-	-	46	424	3.1	942	62.4
430-439	34	432	1021	17	433	1031	-	-	-	51	433	2.5	1024	84.7
440-449	15	444	1075	24	444	1088	-	-	-	39	444	2.5	1083	80.2
450-459	13	454	1154	15	455	1211	-	-	-	28	454	2.9	1184	99.6
460-469	20	464	1221	15	463	1264	-	-	-	35	463	2.6	1239	109.3
470-479	13	474	1276	11	474	1307	-	-	-	24	474	2.9	1290	127.7
480-489	9	483	1362	2	483	1403	-	-	-	11	483	1.8	1370	124.0
490-499	6	493	1499	12	494	1495	-	-	-	18	494	2.5	1496	144.7
500-509	1	508	1820	11	502	1655	-	-	-	12	502	2.9	1668	109.1
510-519	4	512	1538	8	513	1683	-	-	-	12	513	2.2	1634	141.5
520-529	3	524	1805	3	523	1858	-	-	-	6	523	3.3	1832	147.5
530-539	-	-	-	2	533	1993	-	-	-	2	533	4.2	1993	95.5
540-549	1	542	1940	4	542	1943	-	-	-	5	542	1.8	1942	74.2
550-559	-	-	-	1	550	2230	-	-	-	1	550	-	2230	-
TOTAL	210			207			-			417				
MEAN		437	1060		445	1153		-	-		441	37.7	1106	295.0

Table 26. Length composition of commercial whitefish for each seasonal period from area 1E, 1995/96.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
340-349	2	344	500	-	-	-	-	-	-	2	344	2.8	500	56.6
350-359	1	352	605	-	-	-	1	355	555	2	354	2.1	580	35.4
360-369	6	364	658	-	-	-	1	365	645	7	364	2.9	656	73.3
370-379	9	374	656	-	-	-	3	373	730	12	374	3.1	674	58.8
380-389	22	385	752	-	-	-	12	383	747	34	384	2.8	750	48.8
390-399	29	395	822	-	-	-	14	393	779	43	394	3.0	808	65.0
400-409	42	403	865	-	-	-	32	403	844	74	403	2.7	856	67.6
410-419	36	413	928	-	-	-	28	413	920	64	413	2.5	925	58.8
420-429	31	423	983	-	-	-	32	424	988	63	423	2.8	985	65.4
430-439	7	433	1050	-	-	-	26	433	1037	33	433	2.7	1040	79.1
440-449	11	442	1158	-	-	-	19	443	1100	30	443	2.4	1121	75.1
450-459	7	451	1203	-	-	-	7	454	1186	14	453	2.8	1195	63.5
460-469	4	463	1341	-	-	-	10	464	1318	14	464	2.5	1324	94.4
470-479	1	470	1335	-	-	-	14	472	1298	15	472	2.0	1300	69.1
480-489	-	-	-	-	-	-	5	483	1424	5	483	1.3	1424	109.1
490-499	-	-	-	-	-	-	4	493	1591	4	493	3.5	1591	86.7
510-519	1	510	1860	-	-	-	1	510	1585	2	510	0.0	1723	194.5
770-779	1	778	370	-	-	-	-	-	-	1	778	-	370	-
TOTAL	210			-			209			419				
MEAN		410	902		-	-		426	1006		418	33.0	954	202.4

Table 27. Length composition of commercial whitefish for each seasonal period from area II, 1995/96.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
330-339	2	333	500	1	338	455	-	-	-	3	335	4.2	485	30.0
340-349	4	345	529	-	-	-	-	-	-	4	345	3.6	529	27.5
350-359	7	355	555	1	353	600	-	-	-	8	355	3.0	561	49.5
360-369	14	365	626	4	363	606	-	-	-	18	364	2.7	621	49.0
370-379	20	373	676	5	375	721	-	-	-	25	374	3.0	685	42.8
380-389	31	383	734	19	384	754	-	-	-	50	384	2.7	742	56.0
390-399	42	394	804	23	394	761	-	-	-	65	394	3.2	789	69.3
400-409	39	403	828	40	403	837	-	-	-	79	403	2.8	833	52.2
410-419	25	413	881	22	413	902	-	-	-	47	413	2.8	890	59.5
420-429	14	423	977	15	425	962	-	-	-	29	424	2.8	969	82.9
430-439	5	432	1017	12	432	1017	-	-	-	17	432	2.2	1017	73.8
440-449	1	440	935	14	443	1135	-	-	-	15	443	3.0	1121	89.4
450-459	1	453	1155	12	452	1180	-	-	-	13	452	2.2	1178	118.8
460-469	2	463	1340	2	466	1335	-	-	-	4	464	3.3	1338	161.9
470-479	1	475	1655	3	474	1425	-	-	-	4	475	3.7	1483	132.4
480-489	-	-	-	3	485	1515	-	-	-	3	485	2.6	1515	50.0
490-499	1	490	1400	2	492	1635	-	-	-	3	491	1.2	1557	157.5
500-509	-	-	-	3	505	1678	-	-	-	3	505	0.0	1678	107.5
510-519	-	-	-	2	513	1868	-	-	-	2	513	2.8	1868	46.0
520-529	-	-	-	1	529	1760	-	-	-	1	529	-	1760	-
540-549	-	-	-	4	543	2325	-	-	-	4	543	3.8	2325	131.0
550-559	-	-	-	7	554	2335	-	-	-	7	554	3.0	2335	188.6
560-569	-	-	-	1	560	2160	-	-	-	1	560	-	2160	-
570-579	-	-	-	2	575	2425	-	-	-	2	575	3.5	2425	233.3
580-589	-	-	-	4	582	2585	-	-	-	4	582	2.1	2585	422.7
TOTAL	209			202			-			411				
MEAN		394	798		429	1075		-	-		412	43.5	934	383.4

Table 28. Length composition of commercial whitefish for each seasonal period from area III, 1995/96.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
340-349	-	-	-	-	-	-	1	342	520	1	342	-	520	-
350-359	-	-	-	-	-	-	1	355	580	1	355	-	580	-
360-369	-	-	-	-	-	-	2	364	618	2	364	0.7	618	53.0
370-379	-	-	-	-	-	-	11	373	612	11	373	2.4	612	25.7
380-389	-	-	-	-	-	-	15	384	732	15	384	1.5	732	58.6
390-399	-	-	-	-	-	-	32	393	810	32	393	2.4	810	70.8
400-409	-	-	-	-	-	-	52	404	812	52	404	2.9	812	79.1
410-419	-	-	-	-	-	-	47	413	907	47	413	2.6	907	84.6
420-429	-	-	-	-	-	-	62	423	958	62	423	2.9	958	111.2
430-439	-	-	-	-	-	-	54	433	1010	54	433	2.6	1010	108.4
440-449	-	-	-	-	-	-	38	443	1108	38	443	2.6	1108	121.9
450-459	-	-	-	-	-	-	28	453	1239	28	453	2.8	1239	148.9
460-469	-	-	-	-	-	-	14	464	1307	14	464	3.0	1307	185.3
470-479	-	-	-	-	-	-	12	473	1444	12	473	3.2	1444	189.2
480-489	-	-	-	-	-	-	18	483	1701	18	483	2.3	1701	140.2
490-499	-	-	-	-	-	-	11	492	1639	11	492	2.0	1639	326.9
500-509	-	-	-	-	-	-	9	504	1919	9	504	3.1	1919	261.6
510-519	-	-	-	-	-	-	5	513	1927	5	513	2.3	1927	120.7
530-539	-	-	-	-	-	-	4	533	2214	4	533	3.3	2214	220.2
540-549	-	-	-	-	-	-	1	540	2365	1	540	-	2365	-
560-569	-	-	-	-	-	-	2	562	2700	2	562	2.1	2700	297.0
TOTAL	-			-			419			419				
MEAN		-	-		-	-		431	1072		431	34.9	1072	365.1

Table 29. Length composition of commercial whitefish for each seasonal period from area IV, 1995/96.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
330-339	-	-	-	1	330	470	-	-	-	1	330	-	470	-
340-349	-	-	-	-	-	-	2	342	498	2	342	2.1	498	38.9
350-359	-	-	-	-	-	-	2	355	528	2	355	3.5	528	24.7
360-369	-	-	-	1	366	605	5	366	644	6	366	2.3	638	37.8
370-379	-	-	-	3	374	662	17	374	666	20	374	3.5	666	42.5
380-389	-	-	-	10	383	737	35	383	744	45	383	2.2	743	53.0
390-399	-	-	-	14	395	811	37	395	760	51	395	2.6	774	56.2
400-409	-	-	-	28	403	828	43	403	845	71	403	2.6	838	61.1
410-419	-	-	-	33	413	891	34	413	902	67	413	2.6	897	72.7
420-429	-	-	-	38	424	970	13	423	975	51	424	2.6	971	77.3
430-439	-	-	-	26	432	1008	10	434	1120	36	433	2.4	1039	90.6
440-449	-	-	-	18	442	1093	6	442	1059	24	442	2.1	1084	78.9
450-459	-	-	-	14	454	1186	5	454	1199	19	454	2.8	1189	95.1
460-469	-	-	-	8	462	1282	-	-	-	8	462	2.6	1282	134.5
470-479	-	-	-	3	474	1347	-	-	-	3	474	3.5	1347	104.9
480-489	-	-	-	1	480	1115	1	481	1340	2	481	0.7	1228	159.1
490-499	-	-	-	2	493	1703	-	-	-	2	493	3.5	1703	109.6
500-509	-	-	-	6	501	1542	-	-	-	6	501	1.0	1542	191.4
510-519	-	-	-	1	514	1525	-	-	-	1	514	-	1525	-
520-529	-	-	-	1	520	2045	-	-	-	1	520	-	2045	-
530-539	-	-	-	1	530	1900	-	-	-	1	530	-	1900	-
TOTAL	-			209			210			419				
MEAN		-	-		425	992		401	835		413	28.5	913	209.9

Table 30. Length composition of commercial whitefish for each seasonal period from area V, 1995/96.

LENGTH INTERVAL (mm)	WINTER NO.	WINTER MEAN FORK LEN. (mm)	WINTER MEAN DR. WT. (g)	SUMMER NO.	SUMMER MEAN FORK LEN. (mm)	SUMMER MEAN DR. WT. (g)	FALL NO.	FALL MEAN FORK LEN. (mm)	FALL MEAN DR. WT. (g)	TOTAL NO.	TOTAL FORK LENGTH(mm) MEAN	TOTAL FORK LENGTH(mm) SD.	TOTAL DRESSED WEIGHT(g) MEAN	TOTAL DRESSED WEIGHT(g) SD.
360-369	2	360	568	-	-	-	-	-	-	2	360	0.0	568	53.0
370-379	5	375	689	-	-	-	-	-	-	5	375	2.5	689	63.2
380-389	14	384	736	-	-	-	-	-	-	14	384	2.9	736	102.6
390-399	11	395	784	-	-	-	-	-	-	11	395	3.2	784	65.8
400-409	24	404	833	-	-	-	-	-	-	24	404	3.0	833	87.5
410-419	37	414	868	-	-	-	-	-	-	37	414	3.1	868	71.9
420-429	33	424	950	-	-	-	-	-	-	33	424	2.7	950	81.4
430-439	22	433	962	-	-	-	-	-	-	22	433	2.8	962	93.5
440-449	20	444	1104	-	-	-	-	-	-	20	444	3.2	1104	95.8
450-459	15	454	1218	-	-	-	-	-	-	15	454	3.0	1218	171.6
460-469	6	462	1361	-	-	-	-	-	-	6	462	2.7	1361	91.8
470-479	6	472	1290	-	-	-	-	-	-	6	472	2.1	1290	101.0
480-489	11	485	1444	-	-	-	-	-	-	11	485	3.0	1444	130.0
490-499	4	492	1581	-	-	-	-	-	-	4	492	1.8	1581	131.5
TOTAL	210			-			-			210				
MEAN		426	984		-	-		-	-		426	28.6	984	232.7